



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Specifications and Advertisement for Bids for 600-Volt Underground Triplex Cable

MEETING DATE: August 2, 1995

SUBMITTED BY: Electric Utility Director

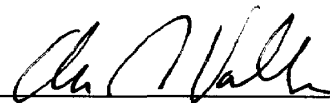
RECOMMENDED ACTION: That the City Council approve the specifications and authorize advertisement for bids for 10,000 feet of #1/0, and 12,000 feet of 350Kcmil, 600-volt underground triplex for the Electric Utility Department.

BACKGROUND INFORMATION: This cable will be needed for installation in new residential subdivisions planned during the next twelve months, and to provide an inventory for routine or emergency maintenance of the existing electrical system.

Some of the developments where this cable will be needed are Century Meadows 2, Units 2 and 3, and the Woodhaven subdivision.

FUNDING: The estimated cost of this purchase is \$35,000, and funding is available in the Electric Utility Department's Operating Fund.

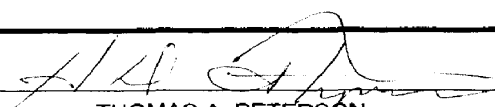
BID OPENING: August 23, 1995



Alan Vallow, Electric Utility Director

Prepared by Joel Harris, Purchasing Officer

APPROVED: _____


THOMAS A. PETERSON
City Manager

EQUIPMENT SPECIFICATIONS

REV. 4/10/90

600-VOLT XLPE TRIPLEX CABLE

GENERAL:

CABLE FURNISHED UNDER THESE SPECIFICATIONS SHALL BE LIMITED TO CROSS-LINKED POLYETHYLENE INSULATED CABLE RATED 600 VOLTS AND SUITABLE FOR INSTALLATION IN DUCTS OR FOR DIRECT BURIAL IN EARTH, IN WET OR DRY LOCATIONS, WITH NORMAL CONDUCTOR TEMPERATURES UP TO 90 DEGREES C. CABLES FURNISHED SHALL MEET THE REQUIREMENTS OF THE APPLICABLE NEMA, ICEA, AEIC AND ASTM STANDARDS, LATEST EDITION THEREOF, UNLESS OTHERWISE NOTED IN THIS SPECIFICATION.

CABLE:

A. CONDUCTOR:

THE CONDUCTOR SHALL BE ALUMINUM ALLOY, EC GRADE, 1/2 TO 3/4 HARD, CLASS B STRANDING.

B. INSULATION:

PHASE CONDUCTOR INSULATION SHALL BE SINGLE-PASS, BLACK, CROSS-LINKED POLYETHYLENE. THE NEUTRAL CONDUCTOR SHALL HAVE YELLOW XLPE INSULATION OR BLACK XLPE INSULATION WITH YELLOW EXTRUDED STRIPES.

C. ASSEMBLY:

THE ASSEMBLED CABLE SHALL CONSIST OF PHASE AND NEUTRAL CONDUCTORS TWISTED TOGETHER WITH A LAY NOT LESS THAN 50 NOR MORE THAN 60 TIMES THE OUTSIDE DIAMETER OF ONE OF THE PHASE CONDUCTORS. ALL CABLE ENDS SHALL BE SEALED TO PREVENT THE ENTRANCE OF MOISTURE.

D. IDENTIFICATION:

EACH CONDUCTOR SHALL HAVE A PERMANENT MARKING SHOWING THE MANUFACTURER'S NAME, VOLTAGE RATING, CONDUCTOR SIZE AND TYPE OF INSULATION.

E. TESTING AND GUARANTEE:

TESTING OF CABLE SHALL BE PERFORMED ACCORDING TO PROCEDURES SET FORTH BY THE ICEA, AEIC AND ASTM. CERTIFIED COPIES OF PASS/FAIL TEST RESULTS SHALL BE SUPPLIED. ANY CABLE FOUND DEFECTIVE EITHER UPON INSPECTION, TESTING OR INSTALLATION WILL BE RETURNED AT THE MANUFACTURER'S EXPENSE.

F. SPECIFIC REQUIREMENTS:

ANY CONDITIONAL BIDS SUCH AS "SUBJECT TO AVAILABILITY IN STOCK" WILL BE REJECTED.

EQUIPMENT SPECIFICATIONS
600-VOLT XLPE TRIPLEX CABLE
PAGE 2

G. SHIPPING:

CABLE ENDS SHALL BE ADEQUATELY SEALED WITH A WATER SEAL-TYPE MATERIAL AND PLASTIC END CAPS SECURED BY TAPE TO PREVENT THE PENETRATION OF MOISTURE. THERE SHALL BE NO WATER IN THE STRANDED CONDUCTOR OF THE CABLE WHEN THE REEL IS SHIPPED. ALL SHIPMENTS SHALL BE PREPAID, F.O.B. LODI, CALIFORNIA. REELS SHALL BE SHIPPED UPRIGHT.

REELS:

A. MAKEUP:

THE SPECIFIED CONDUCTOR SHALL BE SUPPLIED ON NEMA STANDARD REELS AND IN ACCORDANCE WITH TABLE I AS SHOWN BELOW.

TABLE I

CONDUCTOR SIZE PHASE (NEUTRAL)	CODE WORD	MATERIAL	NEMA STANDARD REEL CODE NO.
#2 (#2) AWG	RAMAPO/YES	ALUM	3624
#1/0 (#1/0) AWG	BERGEN/YES	ALUM	3624
350Kcmil (#4/0) AWG	WESLEYAN/YES	ALUM	5432 OR 7236

B. PACKAGING:

EACH REEL SHALL HAVE ADEQUATE PROTECTIVE COVERING ACROSS THE FLANGES; SUCH COVERING TO CONSIST OF WOOD MEMBERS FROM FLANGE TO FLANGE COVERING THE ENTIRE CIRCUMFERENCE OF THE REEL (LAGGING). THE LAGGING SHALL BE NAILED TO THE FLANGE PERIMETERS AND SHALL BE FURTHER SECURED WITH AT LEAST TWO STEEL BANDS AROUND THE REEL. EACH END OF THE CABLE SHALL BE FIRMLY SECURED TO THE REEL.

C. MARKING:

EACH REEL SHALL BE MARKED WITH A DURABLE LABEL SECURELY ATTACHED TO A FLANGE OF THE REEL AND PLAINLY MARKED STATING THE DESTINATION, THE PURCHASER'S ORDER NUMBER, SHIPPING LENGTH OF CABLE ON REEL, TYPE AND SIZE OF CONDUCTORS, INSULATION TYPE AND THICKNESS, VOLTAGE RATING AND MANUFACTURER'S IDENTIFICATION NUMBER.